

**LEGEND**

This legend is common to Open Files 1598 to 1613, and 1628 to 1631. Coloured legend blocks indicate map units that appear on this map. Not all map symbols shown in the legend necessarily appear on this map.

**SURFICIAL DEPOSITS**

**QUATERNARY**

**HOLOCENE**

**FLUVIAL SEDIMENTS:** alluvium; gravel and sand, 2–20 m thick.

- Ap Alluvial plains: active braided floodplains; includes active proglacial outwash.
- At Alluvial terraces
- Af Alluvial fans

**MARINE AND GLACIAL MARINE SEDIMENTS:** gravel, silt, sand, and clay, 1–20 m thick, deposited in deltaic and beach environments during regression of the postglacial sea.

- Mr Beach sediments: gravel and sand, 1–5 m thick, forming ridges and swales.
- Mt Deltaic sediments: clay, silt, sand, and gravel, 5–20 m thick, forming coarsening upward sequences under dissected terraces.
- Mv Deepwater proglacial silt veneers: silt, clay silt, and fine sand with dropstones, 1–2 m thick.
- Mb Deepwater proglacial silt blankets: silt, clay silt, and fine sand with dropstones and minor gravel, 2–10 m thick.

**GLACIAL LACUSTRINE SEDIMENTS:** clay, silt, sand, and gravel deposited in glacier dammed lakes in deepwater, beach and deltaic environments.

- Lr Beach sediments: sand and gravel, 1–5 m thick, forming beach ridges.
- Lt Deltaic sediments: clay, silt, sand, and gravel, 5–20 m thick, forming coarsening upward sequences under dissected terraces.
- Lv Deepwater proglacial silt veneers: silt, clay silt, and fine sand with dropstones, 1–2 m thick.
- Lb Deepwater proglacial silt blankets: silt, clay silt, and fine sand with dropstones, 2–5 m thick.

**GLACIOFLUVIAL SEDIMENTS:** gravel and sand, 1–10 m thick, deposited behind, at, and in front of the ice margin.

- Gp,lf Proglacial outwash: gravel and sand, 1–10 m thick, forming braided floodplains, Gp; terraces, Gf, and fans, Gf.
- Gr,n Ice contact stratified drift: gravel and sand, 1–5 m thick, forming eskers, G; and kames, Gh.

**EARLY HOLOCENE AND WISCONSINAN**

**TILL:** nonsorted stony muds, 0.5–60 m thick, deposited in subglacial and ice marginal environments; lithic composition generally reflects underlying bedrock.

- Tm End moraines: 5–60 m high, composed of or mantled by till, extensively kettled in places; large features mainly covered by debris-rich melt glacier ice.
- Tv Till veneer: 0.5–2 m thick and discontinuous.
- Tvw Till veneer: 0.5–2 m thick, surface armored by stones due to washing by subglacial meltwater.
- Tb Till blanket: 2–10 m thick forming an undulating blanket with drumlins and ribbed moraines in places.
- Tbr Till blanket: 2–10 m thick forming ribbed (Rogen) moraines.

**BEDROCK PRE-QUATERNARY**

**ROCK:** rock of various compositions and ages (Jackson and Sangster, 1987) variously modified by glacial erosion during the Quaternary and with pebbly till cover; hilly and hummocky surfaces, ice moulded in places, with lake basins in subglacially scoured regions; smooth surfaces exhibiting little or no sign of glacial erosion in peninsular interiors (Dyke, 1993); cliffs resulting from glacial over-steepening; in places veneered by thin till, commonly bouldery.

**Geological boundary (defined, assumed)**

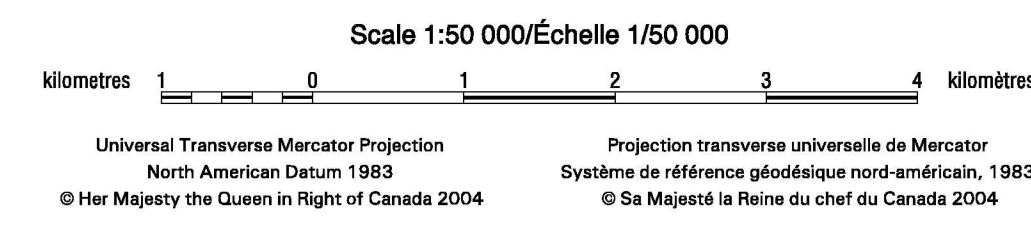
- Areas covered by perennial icefields during the Little Ice Age (indicated by a white pattern)
- Kettle (large)
- Glacial lake spillway
- Glacial lake limit
- Marine limit
- Escarpment
- Lateral meltwater channel; barb on upslope side
- Subglacial and proglacial meltwater channel (small)
- Esker
- Kame
- Ice contact face
- Ribbed moraine
- Lateral moraine
- End moraine
- Margin of dispersal train; teeth toward axis, steep side of teeth face down ice
- Drumlinoid hill
- Crag-and-tail
- Ice moulded bedrock
- Striae (ice flow direction known, unknown)
- Crossed striae (numbers indicate relative age, 1 being the oldest)

**Field observation site:** bouldery diamiction (bd), bouldery gravel (bg), clay (c), diamiction (d), gravel (g), gravely sand (gs), mud (m), muddy sand (ms), rock (r), sand (s), sandy gravel (sg), stony mud (st), stony mud (st) (S)

**Field observation site:** material as above near rock outcrop

**Marine limit elevation (metres)**

OPEN FILE 1629  
SURFICIAL GEOLOGY  
**ELDER ISLAND**  
BAFFIN ISLAND  
NUNAVUT



Geology by A.S. Dyke, 2002  
Field data provided by De Beers Canada Inc., 2002  
Digital cartography by M.M. Proulx, Earth Sciences Sector Information Division (ESS Info)  
This map was produced from processes that conform to the ESS Info Publishing Services Subdivision Quality Management System, registered to the ISO 9001:2000 standard

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada  
Digital base map from data compiled by Geomatics Canada, modified by ESS Info  
Locational accuracy of the base appears to be 1:100m based on plotting of GPS measured field site locations  
Proximity to the North Magnetic Pole causes the magnetic compass to be erratic in this area  
Mean magnetic declination 2004, 37°43'W, decreasing 40.6' annually  
Elevations in metres above mean sea level

47 613 OF 1801	47 614 OF 1800	47 615 OF 1599	47 616 OF 1598
47 617 OF 1602	47 618 OF 1603	47 619 OF 1604	47 620 OF 1605
47 621 OF 1609	47 622 OF 1608	47 623 OF 1607	47 624 OF 1606
47 625 OF 1610	47 626 OF 1611	47 627 OF 1612	47 628 OF 1613
47 629 OF 1628	47 630 OF 1629	47 631 OF 1630	47 632 OF 1631

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2004

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